

REMARKS

Claims 1, 3, 6-23 and 25-29 are pending herein.

By this Amendment, claim 1 is amended to further distinguish the invention of claim 1 from Shirasaki. Claims 23 and 28 are amended to more clearly define the subject matter contained therein, and claims 2, 5 and 24 are canceled.

No new matter is added by this Amendment. Support for the language added to the claims is found in the original specification and claims. In particular, support for the language added to claim 1 is found in original claims 2 and 5 as well as at, for example, Figures 1 and 8. Support for the language added to claims 23 and 28 is found in original claim 24.

Entry of the amendments is proper under 37 CFR §1.116 since the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration; (c) satisfy a requirement of form asserted in the previous Office Action; (d) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (e) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

I. Allowable Subject Matter

Applicant thanks the Examiner for the indication that claim 3 is allowed.

Applicant also notes with appreciation that claims 8 and 9 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

II. Objection

The Patent Office objected to claim 1 because the recitation "is controlled" should be "are controlled." Applicant herein amends claim 1 as suggested by the Examiner to overcome the objection.

III. Rejection Under 35 U.S.C. §112, second paragraph

Claims 1, 23 and 28 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. This rejection is respectfully traversed.

With respect to claim 1, the Patent Office alleges that the claim language fails to describe the structure's relationship. More specifically, the Patent Office alleges the electro-optical device must have a more detailed structural description of the configuration of the device in order to make the device. To overcome this rejection, although without admitting the propriety of the rejection, Applicant amends claim 1 to include a switching element and to further include that the electroluminescence element and the liquid crystal element are controlled by the switching element.

With respect to claims 23 and 28, the Patent Office alleges that these claims are indefinite because the limitations do not include how to selectively drive the electroluminescence element and liquid crystal element for display images. To overcome the rejection, although without admitting the propriety of the rejection, Applicant amends claim 23 to recite selectively driving the electroluminescence element and liquid crystal element for displaying images based on a condition at which the electro-optical device is used and amends claim 28 to recite that the first electro-optical element and the second electro-optical element are selectively driven to display images based on a condition at which the electro-optical device is used.

Applicant submits the requirements of the Patent Office have been met.

Reconsideration and withdrawal of the rejections are thus respectfully requested.

IV. Rejection Under 35 U.S.C. §102(e)

Claims 1, 2, 10, 17, 23-24 and 28-29 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,025,894 (hereinafter "Shirasaki"). This rejection is respectfully traversed.

Claim 1 has been amended to include that the electroluminescence element and the liquid crystal element are controlled by a switching element. This feature is nowhere taught or suggested by Shirasaki.

As discussed in more detail below, the Patent Office acknowledges that Shirasaki does not expressly disclose the switching element controlling the electroluminescence element or the liquid crystal element.

Further, claim 23 recites "each pixel comprising an electroluminescence element and a liquid crystal element" and claim 28 recites "each of the pixels comprising a first electro-optical element and a second electro-optical element different from the first electro-optical element." These features are also nowhere taught or suggested by Shirasaki.

Instead, Shirasaki discloses that electroluminescence is used as back light. (See the Abstract of Shirasaki). Thus, Shirasaki teaches using electroluminescence as a light source, not as a display element of a pixel.

Thus, Shirasaki fails to anticipate the subject matter of claims 1, 23 and 28. That is, Shirasaki fails to disclose that both the electroluminescence element and liquid crystal element are controlled by a switching element, as recited in claim 1; fails to disclose a pixel comprising an electroluminescence element and a liquid crystal element, as recited in claim 23; and fails to disclose a pixel comprising a first electro-optical element and a second electro-optical element different from the first electro-optical element, as recited in 28.

For the foregoing reasons, Applicant respectfully submits that Shirasaki fails to anticipate the subject matter of claims 1, 23, 28 and the claims dependent therefrom. Reconsideration and withdrawal of the rejection are thus respectfully requested.

V. Rejection Under 35 U.S.C. §103(a)

A. Shirasaki in view of Zavracky, Kimura and Yamamoto

Claims 5-7, 11-16, 19-22 and 26-27 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Shirasaki as applied to claims 1, 2, 10, 17, 23, 24, 28 and 29 above, and further in view of U.S. Publication No. 2002/0158823 (Zavracky), U.S. Patent No. 6,133,976 (Kimura) and U.S. Patent No. 5,610, 628 (Yamamoto). This rejection is respectfully traversed.

Claim 5 is canceled herein. Claims 6, 7, 11-16, 19-22, 26 and 27 each depend, either directly or indirectly, from claim 1. With respect to claim 1, the Patent Office acknowledges that Shirasaki does not expressly disclose the switching element controlling the electroluminescence element or the liquid crystal element, as recited by claim 1.

With respect to dependent claims 14-16, 21, 26 and 27, the Patent Office further acknowledges that Shirasaki does not expressly disclose the liquid crystal being a super twisted pneumatic liquid crystal element having a twist angle of 180° or more, as recited by claim 21; that Shirasaki fails to disclose using RAM in pixel, as recited in claims 14-16; and that Shirasaki fails to teach that a device provides a signal to set a usage condition for the liquid crystal element and the electroluminescence element, as recited in claims 26 and 27.

The Patent Office alleges that Zavracky, Kimura and/or Yamamoto cure the deficiencies of Shirasaki. However, even if one of ordinary skill in the art would have found Zavracky, Kimura and/or Yamamoto to teach the limitations recited in claims 6, 7, 11-16, 19-22 and/or 26-27, the presently claimed invention still would not have been achieved. More specifically, as discussed above with respect to claim 1, Shirasaki alone or in combination

with Zavracky, Kimura and/or Yamamoto fails to at least teach or disclose that both the electroluminescence element and a liquid crystal element are controlled by a switching element.

For the foregoing reasons, Applicant submits that claim 1, and claims 6, 7, 11-16, 19-22, 26 and 27 dependent therefrom, are in condition for allowance. Reconsideration and withdrawal of the rejection are thus respectfully requested.

B. Shirasaki in view of Funai

Claim 18 was rejection under 35 U.S.C. §103(a) as allegedly being unpatentable over Shirasaki as applied to claims 1, 2, 10, 17, 23, 24, 28 and 29 above and further in view of U.S. Patent No. 6,162,667 (hereinafter "Funai"). This rejection is respectfully traversed.

Claim 18 indirectly depends from claim 1 and adds that the TFTs are polycrystalline silicon TFTs produced by a low-temperature process of 600°C or less.

Funai was cited as allegedly teaching using a polycrystalline silicone film forming of high performance TFTs having a high mobility and a high ON/OFF ration can be realized with a low-temperature process such as 550°C. Thus, the Patent Office contends that it would have been obvious to those skilled in the art to use polycrystalline silicon forming TFTs by a low-temperature process for obtaining a high performance TFTs.

However, even if one of ordinary skill in the art would have found Funai to teach using polycrystalline silicon TFTs produced by a low-temperature process of 600°C or less, the presently claimed invention still would not have been achieved. Specifically, nothing in Funai remedies the deficiencies of Shirasaki discussed above with respect to amended claim 1. That is, nothing in the combined teachings of Shirasaki and Funai would have led one of ordinary skill in the art to an electro-optical device wherein both an electroluminescence element and a liquid crystal element are controlled by a switching element, as recited in claim 1.

Accordingly, Applicant respectfully submits that Shirasaki and Funai, whether taken alone or in combination, would not have led one of ordinary skill in the art to the invention of claim 1 or depending claim 18. Reconsideration and withdrawal of this rejection is thus respectfully requested.

VI. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 3, 6-23 and 25-29 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Linda M. Saltiel
Registration No. 51,122

JAO:LMS/mlv

Date: June 15, 2004

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
